

## PATENT COOPERATION TREATY

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. <b>PCT/KR2004/000621</b>	International filing date (day/month/year) <b>22 MARCH 2004 (22.03.2004)</b>	Priority date (day/month/year) 22 MARCH 2003 (22.03.2003)	

International Patent Classification (IPC) or national classification and IPC

**IPC7 H04L 9/00**

Applicant

**Lee, You-Young**

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

- a.  (sent to the applicant and to the International Bureau) a total of 3 sheets, as follows:
  - sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
  - sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
- b.  (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_ containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- Box No. I Basis of the report
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

Date of submission of the demand  <b>21 JANUARY 2005 (21.01.2005)</b>	Date of completion of this report  <b>18 APRIL 2005 (18.04.2005)</b>
Name and mailing address of the IPEA/KR Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea  Facsimile No. 82-42-472-7140	Authorized officer  JEONG, Jae Woo  Telephone No. 82-42-481-5718

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/000621

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language English which is the language of a translation furnished for the purposes of:

- international search (under Rules 12.3 and 23.1(b))
- publication of the international application (under Rule 12.4)
- international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

the international application as originally filed/furnished

the description:

pages 1 - 4, 6 - 12 received by this Authority on \_\_\_\_\_ as originally filed/furnished  
 pages\* 5 received by this Authority on 21 Jan. 2005

the claims:

pages 15 as originally filed/furnished  
 pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
 pages\* 13 - 14 received by this Authority on 21 Jan. 2005  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the drawings:

pages \_\_\_\_\_ as originally filed/furnished  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3.  The amendments have resulted in the cancellation of:

the description, pages \_\_\_\_\_  
 the claims, Nos. \_\_\_\_\_  
 the drawings, sheets \_\_\_\_\_  
 the sequence listing (*specify*) : \_\_\_\_\_  
 any table(s) related to sequence listing (*specify*) : \_\_\_\_\_

4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages \_\_\_\_\_  
 the claims, Nos. \_\_\_\_\_  
 the drawings, sheets \_\_\_\_\_  
 the sequence listing (*specify*) : \_\_\_\_\_  
 any table(s) related to sequence listing (*specify*) : \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/000621

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

## 1. Statement

Novelty (N)	Claims	1 - 5	YES
	Claims		NO
Inventive step (IS)	Claims	1 - 5	YES
	Claims		NO
Industrial applicability (IA)	Claims	1 - 5	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

D1 : US 20020091937

D2 : US 4731841

The claimed inventions disclose a system and method for data transmission of N-dimensional information, wherein the basic information unit File\_f comprises a top layer information(T\_f information), a middle layer information(M\_f.n information), and a bottom layer information(B-f information), and the M\_f.n information is N-dimensional structured information.

D1 discloses a method of authentication using biometric attributes and D2 discloses a method of authentication using challenge-response method.

The claimed inventions are different from D1, by reason that the claimed inventions execute authentication by producing information of N-dimensional structure using biometric attributes, while D1 executes authentication by simply judging whether the biometric attribute coincides or not.

The claimed inventions are also different from D2, by reason that the claimed inventions discloses encryption by extracting some N dimensional information and using it as a variable, while D2 discloses a general challenge response method.

Therefore, claims 1-5 of the present invention fulfill the requirement of novelty criterion of PCT Article 33(2) and the requirement of inventive step under PCT Article 33(3).